WHAT IS CLAIMED IS:

1. An orthopedic appliance for application to a body portion, said orthopedic appliance comprising

a substantially rigid structure, said substantially rigid structure having an inner surface and an outer surface, said substantially rigid structure having a plurality of holes therethrough at pre-selected locations; and

a liner affixed to the inner surface of said substantially rigid structure, said liner being of a material that facilitates the transfer of moisture from the body portion out through said holes of said substantially rigid structure to the atmosphere.

- 2. The orthopedic appliance of claim 1 wherein said liner provides substantially uniform compression to the body part to prevent the occurrence of window edema.
 - 3. The orthopedic appliance of claim 1 wherein said device is a prosthesis.
 - 4. The orthopedic appliance of claim 1 wherein said device is an orthosis.
- 5. The orthopedic appliance of claim 4 wherein said orthosis is selected from the group consisting of an ankle brace, a leg brace, a walking brace, and an arm brace.
- 6. An orthopedic appliance for application to a body portion, said orthopedic appliance comprising

a substantially rigid structure, said structure having an inner surface and an outer surface, said structure having a plurality of holes therethrough at pre-selected locations; and

CHI-1391465v1 -13-

a flexible support member affixed to the inner surface of said substantially rigid structure, said flexible support member being constructed so as to allow the transfer of moisture from said body portion through said flexible support member and out through the holes in said structure to the atmosphere.

- 7 The orthopedic appliance of claim 6 wherein said flexible support member is provided with a plurality of holes therethrough, said holes in said flexible support member being in alignment with said holes in said substantially rigid structure.
- 8. The orthopedic appliance of claim 7 wherein said flexible support member is selected from the group consisting of an air cell, a cell filled with a gel, a cell filled with a fluid, a solid gel material, a non-porous foam pad, and a porous foam pad.
- 9. The orthopedic appliance of claim 8 wherein said flexible support member is an air cell and said air cell contains a foam material.
- 10. The orthopedic appliance of claim 6 wherein said flexible support material is a porous material.
- The orthopedic appliance of claim 10 wherein said porous material is an open-cell foam.
- 12. The orthopedic appliance of claim 6, further comprising a liner disposed adjacent the affected body portion, said liner being of a material that facilitates the transfer of moisture

CHI-1391465v1 -14-

from the body portion out through said holes of said substantially rigid structure to the atmosphere.

CHI-1391465v1 . -15-